

**NEW SOURCE CONSTRUCTION PERMIT  
and MINOR SOURCE OPERATING PERMIT  
OFFICE OF AIR MANAGEMENT**

**APG, Inc.  
1919 Superior Street  
Elkhart, Indiana 46516**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-5.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Minor Source Operation Permit No.: MSOP 039-10527-00434	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3, is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

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The Permittee proposes to construct and operate a new consumer product packaging plant.

Authorized Individual: Carlos Robles  
Source Address: 1919 Superior Street, Elkhart, Indiana 46516  
Mailing Address: P.O. Box 878, Elkhart, Indiana 46515  
Phone Number: (219) 295-0000 ext. 2411  
SIC Code: 7389  
County Location: Elkhart  
County Status: Attainment for all criteria pollutants  
Source Status: Minor Source Operating Permit

### A.2 Emissions units and Pollution Control Equipment Summary

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This consumer product packaging source is approved to construct and operate the following emissions units and pollution control devices:

- (a) Cough Syrup Line ID21, with a capacity of 375 gallons per hour. This line includes compounding/mixing and liquid product filling operations, with two (2) mixing vessels M1, and M2 each has a capacity of 1,520 gallons and two (2) process vessels P1 and P2, each has a capacity of 1,360 gallons.
- (b) Cake Icing Line ID20, with a capacity of 150 gallons per hour. This line includes compounding/mixing and liquid product filling operations, with one (1) mixing vessel M3, with a capacity of 100 gallons, two (2) process vessels P3 and P4 each has a capacity of 50 gallons, one (1) holding vessel H1, with a capacity of 500 gallons.
- (c) Liquid Product Lines 22, 23, 24, and 25. Product Line 22 has a capacity of 562.5 gallons per hour, Product Line 25 has a capacity of 508 gallons per hour. Product Lines 23 and 24 are used for non-VOC products. Each line includes compounding/mixing and liquid product filling operations, with twelve (12) mixing vessels M4 through M7 each has a capacity of 350 gallons, M8 and M9 each has a capacity of 2,000 gallons, M10 has a capacity of 550 gallons, M11 through M15 each has a capacity of 500 gallons; three (3) holding tanks H2, H3, and H4 each has a capacity of 5,000 gallons.
- (d) Tube/Stick Product Lines 26, 27, 28 and 29. Each line includes compounding/mixing and tube/stick product filling operations. All Lines have a combined production rate total of 175.0 gallons/hour.
- (e) One (1) Corporate Aerosol Line, with a production rate of 750 gallons/hour, or 200 cans/minute.

- (f) Four (4) Volatile Organic Liquid (VOL) Storage Tanks, S1 and S2, each has a capacity of 6500 gallons each; and SA3 and SA4 each has a capacity of 6000 gallons.
- (g) Eight (8) Pressure Propellant Tanks, identified as S5 through S12. Each tank has a capacity of 10,000 gallons.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) The source shall submit a Title V permit application within twelve (12) months after the source becomes subject to Title V. This 12-month period starts at the postmarked submission date of the Affidavit of Construction.

## **SECTION B                    GENERAL CONSTRUCTION CONDITIONS**

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

### **B.1      Permit No Defense [IC 13]**

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This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### **B.2      Definitions**

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

### **B.3      Effective Date of the Permit [IC13-15-5-3]**

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Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

### **B.4      Revocation of Permits [326 IAC 2-1.1-9(5)]**

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Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.5      Modification to Permit [326 IAC 2]**

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Notwithstanding Condition B.6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

### **B.6      Minor Source Operating Permit [326 IAC 2-6.1]**

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This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a)      The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emissions units were constructed as proposed in the application. The emissions units covered in the New Source Construction Permit may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM.
- (b)      If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c)      The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (d)      The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).

- (e) Pursuant to 326 IAC 2-7-4 and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months after the source becomes subject to Title V. This 12-month period starts at the postmarked submission date of the Affidavit of Construction. If the construction is completed in phases, the 12-month period starts at the postmarked submission date of the Affidavit of Construction that triggers the Title V applicability. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source
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### C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of volatile organic compounds (VOC) is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.

### C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

### C.3 Source Modification [326 IAC 2-7-10.5]

- (a) The Permittee must comply with the requirements of [326 IAC 2-7-10.5] whenever the Permittee seeks to construct new emissions units, modify existing emissions units, or otherwise modify the source.



- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's rights under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

**C.6 Permit Revocation [326 IAC 2-1-9]**

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Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

**C.7 Opacity [326 IAC 5-1]**

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Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

**C.8 Fugitive Dust Emissions [326 IAC 6-4]**

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The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**Testing Requirements**

**C.9 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

### **Compliance Monitoring Requirements**

#### **C.10 Compliance Monitoring [326 IAC 2-1.1-11]**

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date. The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### **C.11 Monitoring Methods [326 IAC 3]**

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

#### **C.12 Actions Related to Noncompliance Demonstrated by a Stack Test**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

### **Record Keeping and Reporting Requirements**

#### **C.13 Annual Emission Statement [326 IAC 2-6]**

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- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
  - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### **C.14 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]**

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- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

**C.15 General Record Keeping Requirements [326 IAC 2-6.1-2]**

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- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;

- (3) All calibration and maintenance records;
- (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

- (a) Cough Syrup Line ID21, with a capacity of 375 gallons per hour. This line includes compounding/mixing and liquid product filling operations, with two (2) mixing vessels M1, and M2 each has a capacity of 1,520 gallons and two (2) process vessels P1 and P2, each has a capacity of 1,360 gallons.
- (b) Cake Icing Line ID20, with a capacity of 150 gallons per hour. This line includes compounding/mixing and liquid product filling operations, with one (1) mixing vessel M3, with a capacity of 100 gallons, two (2) process vessels P3 and P4 each has a capacity of 50 gallons, one (1) holding vessel H1, with a capacity of 500 gallons.
- (c) Liquid Product Lines 22, 23, 24, and 25. Product Line 22 has a capacity of 562.5 gallons per hour, Product Line 25 has a capacity of 508 gallons per hour. Product Lines 23 and 24 are used for non-VOC products. Each line includes compounding/mixing and liquid product filling operations, with twelve (12) mixing vessels M4 through M7 each has a capacity of 350 gallons, M8 and M9 each has a capacity of 2,000 gallons, M10 has a capacity of 550 gallons, M11 through M15 each has a capacity of 500 gallons; three (3) holding tanks H2, H3, and H4 each has a capacity of 5,000 gallons.
- (d) Tube/Stick Product Lines 26, 27, 28 and 29. Each line includes compounding/mixing and tube/stick product filling operations. All Lines have a combined production rate total of 175.0 gallons/hour.
- (e) One (1) Corporate Aerosol Line, with a production rate of 750 gallons/hour, or 200 cans/minute.
- (f) Four (4) Volatile Organic Liquid (VOL) Storage Tanks, S1 and S2, each has a capacity of 6500 gallons each; and SA3 and SA4 each has a capacity of 6000 gallons.
- (g) Eight (8) Pressure Propellant Tanks, identified as S5 through S12. Each tank has a capacity of 10,000 gallons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards

#### D.1.1 Volatile Organic Compounds (VOC) [BACT Minor Limitation]

- (a) The volatile organic compounds (VOC) compounded and filled into containers from Liquid Product Line 22 shall be limited such that the VOC emissions shall be less than 25 tons per twelve- month period, rolled on a monthly basis.

During the first twelve (12) months of operation, VOC compounded and filled shall be limited such that the total VOC compounded and filled divided by accumulated months of operation shall be less than VOC emissions of 2.08 tons per month, rolled on a monthly basis. Therefore, 326 IAC 8-1-6 will not apply.

- (b) The volatile organic compounds (VOC) compounded and filled into containers from Liquid Product Line 25 shall be limited such that the VOC emissions shall be less than 25 tons per twelve- month period, rolled on a monthly basis.



During the first twelve (12) months of operation, VOC compounded and filled shall be limited such that the total VOC compounded and filled divided by accumulated months of operation shall be less than VOC emissions of 2.08 tons per month, rolled on a monthly basis. Therefore, 326 IAC 8-1-6 will not apply.

- (c) The VOC emissions from the Product Lines 22 and 25 shall be calculated using an Emission Factor (EF) of 0.018 pound of VOC per gal VOC (0.018 lb VOC/gal VOC).
- (d) Any change or modification which may increase the potential VOC emissions to 25 tons per year or more from the Stick/Tube product lines 26 through 29 covered in this permit must be approved by the Office of Air Management (OAM) before such change may occur.

**D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6 (General Reduction Requirements)]**

Pursuant to 326 IAC 8-1-6, the best available control technology (BACT) determined for the Corporate Aerosol Line shall be as follows:

- (a) The amount of VOC product, propellant and cans filled at the Corporate Aerosol Line shall be limited such that the VOC emissions shall be less than 80.0 tons per twelve-month period, rolled on a monthly basis.

During the first twelve months of operation, VOC product, propellant and cans filled shall be limited such that the total VOC product, propellant and cans filled divided by accumulated months of operation shall be less than VOC emissions of 6.7 tons per month, rolled on a monthly basis.

- (b) The following emission factors shall be utilized in calculating the VOC emissions:

Facility/Operation	VOC Emission Factor
Compounding and Liquid Filling	0.018 lb VOC/gallon VOC
Propellant Filling	0.0013 lb/can

- (c) Pressure Filling shall be utilized for the propellant filling.
- (d) Closed top tanks shall be utilized in the VOC compounding and mixing.
- (e) Closed bowl method shall be utilized in the product liquid filling.

**D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this emissions units.

**Compliance Determination Requirements**

**D.1.4 Testing Requirements [326 IAC 2-1.1-11]**

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the VOC limits specified in Conditions D.1.1 and D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### **D.1.5 Volatile Organic Compounds (VOC)**

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Compliance with the VOC emission limitations contained in Conditions D.1.1 and D.1.2 shall be determined using formulation data supplied by the VOL/finish product manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

### **Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

#### **D.1.6 Record Keeping Requirements**

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(a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and D.1.2.

- (1) The amount and VOC content of the VOL product filled. Records shall include material safety data sheets (MSDS), product formulation information, VOL compounded/filled and company product records necessary to verify the type and amount used.
- (2) The total VOC compounded/filled and VOC production for each month;
- (3) The number/amount of cans, and propellant filled; and
- (4) The weight of VOCs emitted for each compliance period.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.1.7 Reporting Requirements**

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A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**Minor Source Operating Permit  
Quarterly Report**

Source Name: APG, Inc.  
Source Address: 1919 Superior Street, Elkhart, Indiana 46516  
Mailing Address: P. O. Box 878, Elkhart, Indiana 46515  
Operation Permit: MSOP 039-10527-00434  
Facility: Liquid Product Line 22  
Parameter: Volatile Organic Compounds  
Limit: Shall be less than 25 tons per twelve-month period, rolled on a monthly basis.

During the first twelve (12) months of operation, VOC compounded and filled shall be limited such that the total VOC compounded and filled divided by accumulated months of operation shall be less than VOC emissions of 2.08 tons per month, rolled on a monthly basis.

YEAR: \_\_\_\_\_

Month	This Month		12 Month Total	
	VOC Compounded/Filled (gallons)	VOC Emitted (tons)	VOC Compounded/Filled (gallons)	VOC Emitted (tons)
Month 1				
Month 2				
Month 3				

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**Minor Source Operating Permit  
Quarterly Report**

Source Name: APG, Inc.  
Source Address: 1919 Superior Street, Elkhart, Indiana 46516  
Mailing Address: P. O. Box 878, Elkhart, Indiana 46515  
Operation Permit: MSOP 039-10527-00434  
Facility: Liquid Product Line 25  
Parameter: Volatile Organic Compounds  
Limit: Shall be less than 25 tons per twelve- month period, rolled on a monthly basis.

During the first twelve (12) months of operation, VOC compounded and filled shall be limited such that the total VOC compounded and filled divided by accumulated months of operation shall be less than VOC emissions of 2.08 tons per month , rolled on a monthly basis.

YEAR: \_\_\_\_\_

Month	This Month		12 Month Total	
	VOC Compounded/Filled (gallons)	VOC Emitted (tons)	VOC Compounded/ Filled (gallons)	VOC Emitted (tons)
Month 1				
Month 2				
Month 3				

9 No deviation occurred in this quarter.  
9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**Minor Source Operating Permit  
Quarterly Report**

Source Name: APG, Inc.  
Source Address: 1919 Superior Street, Elkhart, Indiana 46516  
Mailing Address: P. O. Box 878, Elkhart, Indiana 46515  
Operation Permit: MSOP039-10527-00434  
Facility: Corporate Aerosol Line  
Parameter: Volatile Organic Compounds  
Limit: Shall be less than 80 tons per twelve- month period, rolled on a monthly basis.

During the first twelve months of operation, VOC product, propellant and cans filled shall be limited such that the total VOC product, propellant and cans filled divided by accumulated months of operation shall be less than VOC emissions of 6.7 tons per month, rolled on a monthly basis.

YEAR: \_\_\_\_\_

Month	This Month					12 Month Total				
	VOC Compounded/Filled (gallons)	VOC Emitted (tons)	No. of Cans Filled	VOC Emitted (tons)	Total VOC Emitted (tons)	VOC Compounded/Filled (gallons)	VOC Emitted (tons)	No. of Cans Filled	VOC Emitted (tons)	Total VOC Emitted
Month 1										
Month 2										
Month 3										

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

## Indiana Department of Environmental Management Office of Air Management

### Technical Support Document (TSD) for a New Source Construction Permit and Minor Source Operating Permit

#### Source Background and Description

Source Name:	APG, Inc.
Source Location:	1919 Superior Street, Elkhart, Indiana 46516
County:	Elkhart
SIC Code:	7389
Operation Permit No.:	MSOP 039-10527-00434
Permit Reviewer:	Aida De Guzman

The Office of Air Management (OAM) has reviewed an application from APG, Inc. relating to the operation and construction of a new consumer product packaging plant. This plant consists of the following equipment:

- (a) Cough Syrup Line ID21, with a capacity of 375 gallons per hour. This line includes compounding/mixing and liquid product filling operations, with two (2) mixing vessels M1, and M2 each has a capacity of 1,520 gallons and two (2) process vessels P1 and P2, each has a capacity of 1,360 gallons.
- (b) Cake Icing Line ID20, with a capacity of 150 gallons per hour. This line includes compounding/mixing and liquid product filling operations, with one (1) mixing vessel M3, with a capacity of 100 gallons, two (2) process vessels P3 and P4 each has a capacity of 50 gallons, one (1) holding vessel H1, with a capacity of 500 gallons.
- (c) Liquid Product Lines 22, 23, 24, and 25. Product Line 22 has a capacity of 562.5 gallons per hour, Product Line 25 has a capacity of 508 gallons per hour. Product Lines 23 and 24 are used for non-VOC products. Each line includes compounding/mixing and liquid product filling operations, with twelve (12) mixing vessels M4 through M7 each has a capacity of 350 gallons, M8 and M9 each has a capacity of 2,000 gallons, M10 has a capacity of 550 gallons, M11 through M15 each has a capacity of 500 gallons; three (3) holding tanks H2, H3, and H4 each has a capacity of 5,000 gallons.
- (d) Tube/Stick Product Lines 26, 27, 28 and 29. Each line includes compounding/mixing and tube/stick product filling operations. All Lines have a combined production rate total of 175.0 gallons/hour.
- (e) One (1) Corporate Aerosol Line, with a production rate of 750 gallons/hour, or 200 cans/minute.
- (f) Four (4) Volatile Organic Liquid (VOL) Storage Tanks, S1 and S2, each has a capacity of 6500 gallons each; and SA3 and SA4 each has a capacity of 6000 gallons.
- (g) Eight (8) Pressure Propellant Tanks, identified as S5 through S12. Each tank has a capacity of 10,000 gallons.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
SV001	Cough Syrup Line 21	45	1.5	1,500	70
SV002	Cough Syrup Line 21	45	1.5	1,500	70
SV003	Liquid & Gel Line 25	45	1.5	1,500	70
SV004	Liquid & Gel Line 26	45	1.5	1,500	70
SV005	Liquid Line 22	45	1.5	1,500	70
SV006	Line 22 & 23	45	1.5	1,500	70
SV007	Aerosol Liquid Fill Room	45	1.5	2,000	70
SV008	Aerosol Compounding Area	45	1.5	2,000	70
SV009	Aerosol Gas Room	45	1.5	6,5000	70

### Source Definition

This consumer product manufacturing company consists of two (2) plants:

- (a) Plant 1, Accra Pac Group is located at 2730 Middlebury Street, Elkhart, Indiana; and adjacent properties; and
- (b) Plant 2, APG, Inc. is located at 1919 Superior Street, Elkhart, Indiana.

The two (2) sources are owned by one parent company, and have the same SIC codes, but are located about two (2) miles apart.

IDEM has determined that Plant 1, Accra Pac Group and Plant 2, APG, Inc. are considered **separate** sources.

### Recommendation

The staff recommends to the Commissioner that the Minor Source Operating Permit (MSOP) be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 29, 1998. Additional information was received on April 8, 1999, and May 7, 1999.

## Emission Calculations

### (a) Product Packaging Emissions:

Facility/Process	Emissions Factor (lb VOC/gal VOC)	Throughput	% VOC	VOC Uncontrolled/Unlimited PTE (tons/year)	VOC Limited PTE (tons/year)
Cough Syrup Line 21: Compounding & Liquid Product Filling	0.018 lb VOC/gal VOC	375 gal/hour	23.7%	7.0	7.0
Cake Icing Line 20 - There is no VOC emissions coming from this line					
Liquid Product Line 22: Compounding & Liquid Product Filling	0.018 lb VOC/gal VOC	562.5 gal/hr	61%	27.0	24.0
Liquid Product Lines 23 & 24 - Produce non-VOC product					
Liquid Product Line 25: Compounding & Liquid Product Filling	0.018 lb VOC/gal VOC	508 gal/hr	61%	24.4	24.0
Stick/Tube Product Line 26: Compounding/ Stick/Tube Product Filling	0.018 lb VOC/gal VOC	7.03 gal/hr	75%	0.41 VOC	10.34
Stick/Tube Product Line 27: Compounding/ Stick/Tube Product Filling	0.018 lb VOC/gal VOC	32.8 gal/hr	75%	1.9 VOC	
Stick/Tube Product Line 28: Compounding/ Stick/Tube Product Filling	0.018 lb VOC/gal VOC	121.25 gal/hr	75%	7.2 VOC	
Stick/Tube Product Line 29: Compounding/ Stick/Tube Product Filling	0.018 lb VOC/gal VOC	14.06 gal/hr	75%	0.83 VOC	
Corporate Aerosol Line: Compounding & Liquid Product Filling  Corporate Aerosol Line: Propellant Filling	0.018 lb VOC/gal VOC	750 gal/hr	75%	44.0	$44 * 4160/8760 = 20.9$ ton/yr + 50% contingency = <b>31.4</b> ton/yr  $68.3 * 4160/8760$ $= 32.4$ ton/yr + 50% contingency = <b>48.6</b> ton/yr  Total = <b>80</b> ton/yr
	0.0013 lb/can	200 cans/minute	75%	68.3	
TOTAL				179.7 - VOC	145.3



- (b) Storage Tanks Emissions: See Tanks 3 Program Spreadsheet for Detailed Emission Calculations
- (c) Propane Tanks S5 through S12 (Pressure Tanks):  
There are no emissions coming from pressure tanks, because they are designed to operate in excess of 204.9 kPa.

### Potential To Emit Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	0.0
PM-10	0.0
SO <sub>2</sub>	0.0
VOC	181.46
CO	0.0
NO <sub>x</sub>	0.0

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29) of volatile organic compounds (VOC) are equal to or greater than 100 tons per year .Therefore, the source is subject to the provisions of 326 IAC 2-7.

The source should submit a Title V permit application within twelve (12) months after the issuance of this Minor Source Operating Permit (MSOP).

### County Attainment Status

The source is located in Elkhart County.

Pollutant	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone.

## Source Status

New Source PSD Definition (emissions, based on Product Lines 22 and 25 being limited to 24 tons of VOC per year each):

Pollutant	Emissions (tons/year)
PM	0.0
PM-10	0.0
SO <sub>2</sub>	0.0
VOC	145.8
CO	0.0
NOx	0.0

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

## Federal Rule Applicability

- (a) New Source Performance Standards:

- (1) 40 CFR Part 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels) for which Construction, Reconstruction, or Modification commenced after July 23, 1984 applies to each storage vessel, with a capacity greater than 40 m<sup>3</sup> (10,567 gallons).
- (a) VOL Storage tanks S1, S2, SA3 and SA4 are not subject to this NSPS, because each tank's capacity is less than 40 m<sup>3</sup> (10,567 gallons),
- (b) Pressure tanks, S5 through S12 are exempted from this NSPS, because they are designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.
- (2) 40 CFR § 60.610, Subpart III - Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes.

This NSPS applies to each air oxidation reactor unit for which Construction, Modification or Reconstruction commenced after October 21, 1983 that produces any chemical or compounds listed in this NSPS as a product, co-product, by-product or intermediate product.

The APG, Inc. is not subject to this NSPS because it does not involve any chemical or compound production. APG, Inc. operation mainly involves chemical compounding and packaging.

- (3) 40 CFR § 60.660, Subpart NNN - Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.

This NSPS applies to each distillation unit for which Construction, Modification or Reconstruction commenced after December 30, 1983 that produces any chemical or compounds listed in this NSPS as a product, co-product, by-product

or intermediate product.

The APG, Inc. is not subject to this NSPS because it does not involve any chemical or compound production. APG, Inc. operation mainly involves chemical compounding and packaging.

- (4) 40 CFR § 60.700, Subpart RRR - Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

This NSPS applies to each reactor process for which Construction, Modification or Reconstruction commenced after June 29, 1990 that produces any chemical or compounds listed in this NSPS as a product, co-product, by-product or intermediate product.

The APG, Inc. is not subject to this NSPS because it does not involve any chemical or compound production. APG, Inc. operation mainly involves chemical compounding and packaging.

- (b) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (c) National Emission Standards for Hazardous Air Pollutants (NESHAP):  
There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) applicable to the source.

#### **State Rule Applicability - Entire Source**

- (a) 326 IAC 2-6 (Emission Reporting)  
This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC and is located in Elkhart County, which is one of the counties in the rule. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).
- (b) 326 IAC 5-1 (Visible Emissions Limitations)  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:
- (1) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### **State Rule Applicability - Individual Facilities**

- (a) 326 IAC 8-1-6 (General Reduction Requirements for New Facilities):  
This rule will apply to new facilities existing as of January 1, 1980, which have potential VOC emissions of 25 tons per year.
- (1) Stick /Tube Product Lines 26 through 29 are considered one facility, since some processes in one product line can go from one product line to another. Their total VOC emissions of 10.34 tons/yr is less than 25 tons per year. Therefore, this

- facility is not subject to 326 IAC 8-1-6.
- (2) The proposed Liquid Product Line 22, 25, and the Corporate Aerosol Line are subject to this rule, because each line potential VOC emissions are greater than 25 tons per year.
- (a) Liquid Product Line 22 input usage is limited in order to restrict the VOC emissions to less than 25 tons per year. Therefore, 326 IAC 8-1-6 does not apply in this case.
- (b) Liquid Product Line 25 input usage is limited in order to restrict the VOC emissions to less than 25 tons per year. Therefore, 326 IAC 8-1-6 does not apply in this case.
- (3) The Corporate Aerosol Line is subject to 326 IAC 8-1-6, since its VOC emissions of 112.3 tons/year are greater than 25 tons per year. The source has submitted the following BACT Analysis for this facility:

BACT Analysis:

BACT analysis for VOC submitted by APG, Pharmaceuticals Services, LLC has been conducted in accordance with the "Top Down BACT Guidance" U.S. EPA, Office of Air Quality Planning and Standards, March 15, 1990.

(a) First Evaluation:

The source analysis includes Control Technologies found in the U.S. EPA RACT/BACT/LAER Clearinghouse database. **A search of the three (3) databases covering different time periods and completeness resulted in no entrees of RACT, BACT or LAER determinations for facilities or processes in the aerosol can filling industry designated as Process Code 49.001.**

(b) Second Evaluation:

The following factors were considered in the analysis:

- (1) Evaluation of the process and the selection of the raw materials with the lowest VOC content.

As a contract filling operation APG, Inc. fills containers with materials specified by the customers. APG does not choose the materials.

- (2) Evaluation of the process to choose techniques that will reduce emissions.

Operations at APG consist of the following steps:  
mixing/compounding, liquid filling and propellant filling.

Mixing is done in closed top tanks, which has lower emissions compared to open tanks.

Liquid filling is done using the closed bowl filling method, instead of an open bowl method. Liquid product is added to a reservoir or bowl that is situated above a carousel-type filling unit. A pre-set amount of liquid is injected into a container as it moves through the filling unit. The closed bowl method emits less, compared to open bowl method.

Propellant is added to aerosol products using the Pressure Fill (PF). This method emits about 33% (1ml per can versus 3.0 ml per can) of the Under The Cup (UTC) without the vapor recovery system. The vapor recovery system, which can be used with the UTC can't be added with the PF system.

- (c) Evaluation of the feasibility of add-on controls.
  - (1) Carbon Adsorption - Carbon Adsorption uses activated carbon to adsorb VOC. It is limited in that many chemicals, especially highly volatile compounds do not adsorb onto carbon. Since the gas stream in this operation consists largely of methyl alcohol, isobutane and propane, carbon adsorption is **not technically feasible** option. (See pages 1-416, Handbook of Separation Technique for Chemical Engineers, Philip Schweitzer-Editor). This option was eliminated for further evaluation.
  - (2) Condensation - Condensation converts gas or vapor into a liquid by lowering the temperature and/or increasing the pressure. Condensation works best on streams with very high concentrations and/or high boiling points. This operation has very low concentration emission streams consisting of low boiling point materials. Therefore, condensation would have a very low efficiency and **would not** be a **feasible option** for this process. This option was eliminated for further evaluation.
  - (3) Gas Absorption - Gas Absorption captures the pollutants in a liquid, commonly referred to as the scrubbing liquor. This system generally requires that the gas constituents in the air stream are soluble in an aqueous sorbate. The propane and isobutane used at the source are insoluble in water. Also, due to the low concentrations and the variety of the VOCs involved, gas absorption is **not a feasible option**. Equilibrium stage operations such as this require larger concentrations to efficiently make separations. This option was eliminated for further evaluation.
  - (4) Incineration - Control by incineration involves the destruction of the pollutants by oxidation. This involves an ignition source. The type of operation being conducted at APG, Inc. involving aerosol products is covered by National Fire Protection Association Code 30B, which calls for the elimination of ignition sources. The Director of the Inspections of the Elkhart Fire Department has recommended against the use of the incineration devices in this facility for safety reasons (letter attached).
- (d) BACT Conclusion:

The control option available for the removal of VOCs from the emission stream from this consumer product lines are either not technically feasible or are not acceptable for safety reasons.
- (e) VOC BACT Determination:

Pursuant to 326 IAC 8-1-6, the BACT determined for the Corporate Aerosol Line is as follows:

  - (1) The VOL compounded and filled, including the propellant from the Corporate Aerosol Line shall be limited to 80 tons per twelve-month period rolled on a monthly basis (this limit is based on the actual emissions plus a contingency of 50% of the actual).

- (2) The use of Pressure Filling shall be utilized in the propellant filling, and
  - (3) The use of closed top mixing tanks, and closed bowl liquid filling method.
- (b) 326 IAC 2-4.1-1 (New Source Toxics Control)  
This consumer product packaging plant is not subject to this rule because no Hazardous Air Pollutant is emitted from this facility.

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

No Hazardous Air Pollutants (HAPs) are emitted from this facility.

### **Conclusion**

The operation of this consumer product packaging plant shall be subject to the conditions of the attached proposed **New Source Construction Permit and Minor Source Operating Permit MSOP 039-10527-00434.**

## Indiana Department of Environmental Management Office of Air Management

### Addendum to the Technical Support Document for New Source Construction and Minor Source Operating Permit

Source Name:	APG, Inc.
Source Location:	1919 Superior Street, Elkhart, Indiana 46516
County:	Elkhart
Minor Source Operating Permit No.:	MSOP 039-10527-00434
SIC Code:	7389
Permit Reviewer:	Aida De Guzman

On August 11, 1999, the Office of Air Management (OAM) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that APG, Inc. had applied for a construction permit and a Minor Source Operating Permit to construct and operate a consumer product packaging source. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 1, 1999, APG, Inc., submitted comments regarding the proposed permit via letter, and a follow up e-mail of the comments on September 14, and 16, 1999. The summary of the comments and corresponding responses is as follows (changes are bolded for emphasis):

Comment 1: Page 4 of 21, A.1 of the proposed permit: The correct telephone extension number for Mr. Robles is 2411.

Response 1: The listed telephone extension number in Section A.1 on page 4 of 21 of the proposed permit was corrected to 2411.

Comment 2: Page 9 of 21, C.4(e) of the proposed permit: We do not believe that IDEM has the proper authority to "Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements." Also, please note that safety requirements in many areas of the facility will prohibit electronic and other equipment that is not appropriately rated for the area classification. Consequently, the use of any electronic or other device that could produce a spark or heat must be approved in advance by the APG, Inc. Safety Department and may be subject to use according to a permit issued by that department. With respect to C.4(e)(1), it is unreasonable to require that a claim of confidentiality must be made in writing before or at the time the information is removed from the source. Often, consultation with others (such as a customer or an attorney) is needed and the concerned persons may not be readily available. Consequently, the only requirement should be that a claim of confidentiality be made within a reasonable period of time after the information is removed from the source.

Response 2: Photographs are routinely taken to document conditions during an inspection, and are included in the new rule 326 IAC 2-5.1-3(e)(4)(B). The use of cameras or other recording, testing, or monitoring equipment for the purpose of assuring compliance with this permit, if necessary, is a reasonable extension of this documentation.

OAM would follow any plant safety rules related to the use of electronic equipment and recognize that certain areas of the plant maybe off limits to some electronic devices.

Section (e)(1) and (2) are deleted in the final permit. Changes to Condition C.4 is as follows:

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C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, **and subject to the Permittee's rights under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such**, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

~~(1) — The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]~~

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~~(2) — The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]~~

Comment 3: Pages 13 and 14 of 21, C.14 and C.15: Sections C.14 and C.15(b) and (c) concerning monitoring data and information are not applicable, and should be deleted .

Response 3: This condition applies to all records required in Section D. The purpose of Section C is to state general conditions once, so that they do not have to be restated in every subsection of Section D. Unless a term in Section D states otherwise, the Section C general term applies. Conditions C.14 and C.15 in the proposed permit will stay.



Comment 4: Page 16 and 17 of 21, D.1.1(a) and D.1.2(a): The emission limitation is an annual limit and we do not believe IDEM has the authority or any reasonable basis for imposing an additional monthly limit during the first 12 months of operation.

Response 4: Pursuant to 326 IAC 2-1.1-11, the Commissioner may require stack testing, monitoring or reporting at any time to assure compliance with all applicable requirements.

Since APG, Inc. is a proposed new source, and there is no data or historical records available for the first year to show variations in the production, OAM limits the source's usages for the first year to as short a term as possible. The requirements for a short term limits prevents the enforcing agency from having to wait for long periods of time to establish a continuing violation before initiating an enforcement action.

Second paragraph of Conditions D.1.1(a), D.1.1(b), and D.1.2(a) shall be revised as follows:

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D.1.1 Volatile Organic Compounds (VOC) [BACT Minor Limitation]

- (a) The volatile organic compounds (VOC) compounded and filled into containers from Liquid Product Line 22 shall be limited such that the VOC emissions shall ~~not exceed~~ **be less than 25 tons** per twelve-month period, rolled on a monthly basis.

During the first twelve (12) months of operation, VOC compounded and filled shall be limited such that the total VOC compounded and filled divided by accumulated months of operation shall ~~not exceed~~ **be less than** VOC emissions of 2.08 tons per month, **rolled on a monthly basis**. Therefore, 326 IAC 8-1-6 will not apply.

- (b) The volatile organic compounds (VOC) compounded and filled into containers from Liquid Product Line 25 shall be limited such that the VOC emissions shall be less than 25 tons per twelve-month period, rolled on a monthly basis.

During the first twelve (12) months of operation, VOC compounded and filled shall be limited such that the total VOC compounded and filled divided by accumulated months of operation shall ~~not exceed~~ **be less than** VOC emissions of 2.08 tons per month, **rolled on a monthly basis**. Therefore, 326 IAC 8-1-6 will not apply.

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D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6 (General Reduction Requirements)]

Pursuant to 326 IAC 8-1-6, the best available control technology (BACT) determined for the Corporate Aerosol Line shall be as follows:

- (a) The amount of VOC product, propellant and cans filled at the Corporate Aerosol Line shall be limited such that the VOC emissions ~~will not exceed~~ **shall be less than 80.0 tons** per twelve-month period, rolled on a monthly basis.

During the first twelve months of operation, VOC product, propellant and cans filled shall be limited such that the total VOC product, propellant and cans filled divided by accumulated months of operation shall ~~not exceed~~ **be less than** VOC emissions of 6.7 tons per month, **rolled on a monthly basis**.

Comment 5: Page 17 of 21, D.1.3: Since there is no emission control equipment, no Preventive Maintenance Plan is applicable and this requirement should be deleted.

Response 5: The requirements to maintain a Preventive Maintenance Plan is applicable to any facility that is required to obtain a permit under 326 IAC 2-1-2 and 326 IAC 2-1-4. Facility may include emission control equipment and combustion or process equipment or processes. A PMP can be created to reduce excessive malfunctions in combustion and process equipment, as well as control devices, thus minimizing emissions. Therefore, condition D.1.3 will remain.

Comment 6: Page 17 of 21, D.1.5: Since the formulation data will be sufficient for compliance determinations, we object to IDEM reserving authority to determine compliance using Method 24. If no changes are made on the permit, APG, Inc. acceptance of this permit does not constitute waiver of its right to object to any future testing requirements.

Response 6: Formulation data, like the VOC content, water content, density, weight of solids, from the MSDS are just estimations, and are not accurate. The only way to assure that the source is in compliance is through actual testing using Method 24. This condition will not be revised.

Comment 7: Page 18 of 21, D.1.6(a)(1) and (2): The reference to "the type" of VOL compounded/filled should be deleted as it is irrelevant. Also, it should be indicated that product records are to show the month of production (not the dates of production).

Response 7: D.1.6(a)(1): The "type" of the volatile organic liquid (VOL) or the chemical name of the substances used should be known, for identification purposes when quantifying each substance VOC emissions in addition to the MSDS, and product formulation information. The word "type" in condition D.1.6(a)(1) will not be deleted.

D.1.6(a)(2) will be deleted in the permit, since item (a)(3) of this condition is sufficient. See below condition.

#### D.1.6 Record Keeping Requirements

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(a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (5 4) below. Records maintained for (1) through (5 4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and D.1.2.

(1) The amount and VOC content of the VOL product filled. Records shall include material safety data sheets (MSDS), product formulation information, VOL compounded/filled and company product records necessary to verify the type and amount used.

~~(2) VOC compounded/filled and product records, showing dates of production;~~

~~(3 2)~~ The total VOC compounded/filled and VOC production for each month;

~~(4 3)~~ The number/amount of cans, and propellant filled; and

~~(5 4)~~ The weight of VOCs emitted for each compliance period.

Comment 8: Pages 19, 20 and 21 of 21, Quarterly Reports: The column for "Previous 11 Months" should be deleted. Since the current month and 12 month totals are being reported, the referenced column is unnecessary.

Response 8: The column for "Previous 11 Months" in all the quarterly Reporting Forms will be deleted.

Comment 9: Affidavit of Construction  
The draft contains some errors such as the address but we will be modifying the document to reflect construction in phases so no changes are needed at this time.

Response 9: OAM made the changes to the address listed in the Affidavit of Construction.

#### Technical Support Document

Comment 1: Page 3 of 9, Product Packaging Emissions: The % VOC for Corporate Aerosol Line Propellant Filling should be indicated as 100% (not 75%).

Response 1: The 75% VOC for Corporate Aerosol Line Propellant Filling in the original TSD is a typographical error. The emissions from this line has been verified and found to be correct, and the % VOC was based on 100%. It will be noted here that this line % VOC is 100%.

## Identification Ethanol Storage Tanks

Identification No.: S1, S2, SA3 and SA4

City: Elkhart

State: IN

Company: APG, Inc.

Type of Tank: Horizontal Fixed Roof

Description: VOL Tanks

## Tank Dimensions

Shell Length (ft): 16.0

Diameter (ft): 8.0

Volume(gallons): 6500 each for S1 and S2

6000 each for SA3, and SA4

Is tank underground? (Y/N): N

Turnovers: 250.0

Net Throughput (gal/yr): 1500000

## Paint Characteristics

Shell Color/Shade: White/White

Shell Condition: Good

## Breather Vent Settings

Vacuum Setting (psig): 0.00

Pressure Setting (psig): 0.00

Meteorological Data Used in Emission Calculations: South Bend, Indiana

(Avg Atmospheric Pressure = 14.7 psia)

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Mixture/Component	Liquid									
	Daily Liquid Surf. Temperatures (deg F) Month	Bulk			Vapor			Liquid	Vapor	Ma
		Avg.	Min.	Max.	Vapor Pressures (psia) (deg F) Avg.	Min.	Max.	Mol.	Mass	
								Weight	Frac	
Isopropyl alcohol C=219.610	All	50.94	46.29	55.59	49.42	0.3423	0.2861	0.4081	60.090	

## Annual Emission Calculations

Standing Losses (lb): 29.3140  
 Vapor Space Volume (cu ft): 510.96  
 Vapor Density (lb/cu ft): 0.0038  
 Vapor Space Expansion Factor: 0.044904  
 Vented Vapor Saturation Factor: 0.932333

Tank Vapor Space Volume  
 Vapor Space Volume (cu ft): 510.96  
 Tank Diameter (ft): 8.0  
 Effective Diameter (ft): 13  
     Vapor Space Outage (ft): 4.00  
         Tank Shell Height (ft): 16.0

Vapor Density  
 Vapor Density (lb/cu ft): 0.0038  
 Vapor Molecular Weight (lb/lb-mole): 60.090000  
 Vapor Pressure at Daily Average Liquid  
     Surface Temperature (psia): 0.342349  
 Daily Avg. Liquid Surface Temp. (deg R): 510.61  
 Daily Average Ambient Temp. (deg. R): 509.07  
 Ideal Gas Constant R  
     (psia cuft /(lb-mole-deg R)): 10.731  
 Liquid Bulk Temperature (deg R): 509.09  
 Tank Paint Solar Absorptance: 0.17  
 Daily Total Solar Insolation  
 Factor (Btu/sqftday): 1138.00

Vapor Space Expansion Factor  
 Vapor Space Expansion Factor: 0.044904  
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Daily Vapor Temperature Range (deg R): 18.59  
 Daily Vapor Pressure Range (psia): 0.121989  
 Breather Vent Press. Setting Range(psia): 0.00  
 Vapor Pressure at Daily Average Liquid  
     Surface Temperature (psia): 0.342349  
 Vapor Pressure at Daily Minimum Liquid  
     Surface Temperature (psia): 0.286075  
 Vapor Pressure at Daily Maximum Liquid  
     Surface Temperature (psia): 0.408064

Daily Avg. Liquid Surface Temp. (deg R):	510.61
Daily Min. Liquid Surface Temp. (deg R):	505.96
Daily Max. Liquid Surface Temp. (deg R):	515.26
Daily Ambient Temp. Range (deg.R):	18.30

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#### Annual Emission Calculations

##### Vented Vapor Saturation Factor

Vented Vapor Saturation Factor:	0.932333
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	0.342349
Vapor Space Outage (ft):	4.00

Working Losses (lb):	210.6249
Vapor Molecular Weight (lb/lb-mole):	60.090000
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	0.342349
Annual Net Throughput (gal/yr):	1500000
Turnover Factor:	0.2867
Tank Diameter (ft):	8.0
Working Loss Product Factor:	1.00

Total Losses (lb):	239.94 lb
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## Annual Emissions Report

Liquid Contents	Losses (lbs.):		Total
	Standing	Working	
Isopropyl alcohol	29.31	210.62	239.94
Total:	29.31	210.62	239.94 * 4 tanks = 959.76 lb * ton/2000 lb
			= 0.5 ton/yr